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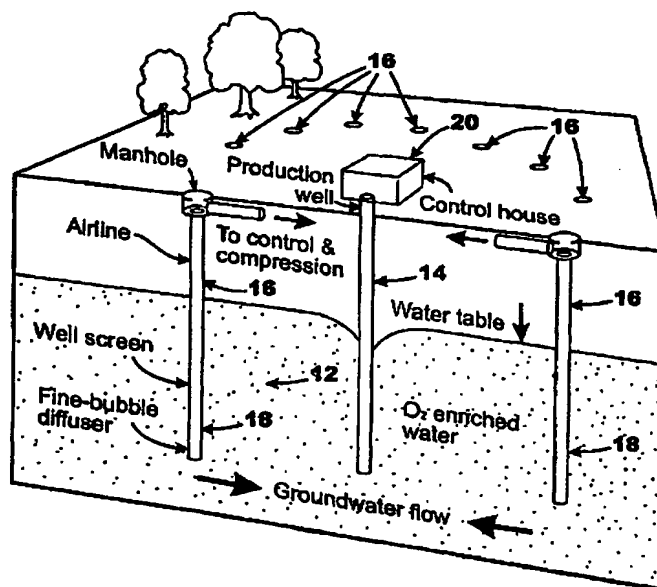
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[Continued on next page]

(54) Title: APPARATUS, METHOD AND SYSTEM OF TREATMENT OF ARSENIC AND OTHER IMPURITIES IN GROUND WATER



(57) Abstract: The invention uses apparatus, methods or systems, e.g., fine pore diffusers (18), to saturate ground water with a gas, preferably oxygen, but also possibly methane, air, inert or noble gasses and/or carbon dioxide. The pore diffusers (18) can be in a ring of aeration injection wells (16) in a large concentric ring around a production well. By increasing the dissolved oxygen level in the ground water, undesirable constituents such as iron or arsenic are lowered in concentration. Methods can be employed to optimize the ground water treatment by injection of other substances, such as iron, as well as predict, model, design, monitor and maintain the treatment process.

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